

Appl. No. 10/038,170
Atty. Docket No. 6768CD
Amdt. dated January 25, 2005
Reply to Notice of Allowance November 15, 2004
Customer No. 27752

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-9 (canceled)

10. (currently amended) A[[n]] composition suitable as a source for making alkylarylsulfonate surfactants, wherein said composition comprises at least two isomers of the formula:



wherein:

L is an acyclic aliphatic hydrocarbyl of from 6 to 18 carbon atoms in total;

R' is selected from H and C₁ to C₃ alkyl;

R'' is selected from H and C₁ to C₃ alkyl;

both R' and R'' are nonterminally attached to L and at least one of R' and R'' is C₁ to

C₃ alkyl;

R''' is selected from H and C₁ to C₃ alkyl; and

A is an aromatic hydrocarbon selected from the group consisting of benzene, toluene, xylene, naphthalene, and mixtures thereof;

wherein:

said alkylaryl composition comprises two or more isomers with respect to positions of attachment of R', R'' and A to L;

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in at least about 60% of said alkylaryl composition, A is attached to L in the position which is selected from positions alpha- and beta- to either of the two terminal carbon atoms thereof; and
wherein further said alkylaryl composition has a ratio of nonquaternary to quaternary carbon atoms in L of at least about 10:1 by weight, when said quaternary carbon atoms are present.

11. (canceled)

12. (canceled)

13. (currently amended) The composition according to Claim [[2]] 10 wherein A is benzene.

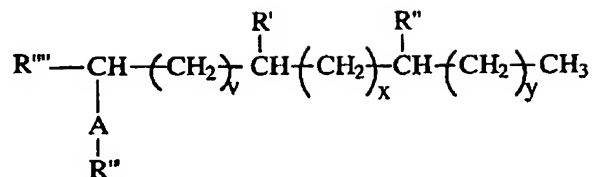
14. (currently amended) The composition according to Claim [[2]] 10 wherein A is toluene.

15. (currently amended) The composition according to Claim [[1]] 10 wherein one of R' and R" is methyl or ethyl.

16. (currently amended) The composition according to Claim [[1]] 10 wherein one of R' and R" is methyl.

17. (currently amended) A_{[[n]]} composition suitable as a source for making alkylarylsulfonate surfactants, wherein said composition comprises at least two isomers, counted exclusive of ortho-, meta-, para-, and stereoisomers, of the formula:

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wherein A is an aromatic hydrocarbon selected from the group consisting of benzene, toluene, xylene, naphthalene, and mixtures thereof; R''' is selected from H and C₁ to C₃ alkyl; R' is selected from hydrogen and C₁ to C₃ alkyl; R'' is selected from hydrogen and C₁ to C₃ alkyl; and R''' is selected from hydrogen and C₁ to C₄ alkyl; v is an integer from 0 to 10; x is an integer from 0 to 10; y is an integer from 0 to 10;

wherein:

the total number of carbon atoms attached to A is less than about 20;

said composition comprises two or more isomers with respect to positions of attachment of R', R'' and A to the moiety

R'''-C(-)H(CH₂)_vC(-)H(CH₂)_xC(-)H(CH₂)_y-CH₃ of this formula;

at least one of R' and R'' is C₁ to C₃ alkyl; when R''' is C₁, the sum of v + x + y is at least 1; and when R''' is H, the sum of v + x + y is at least 2; and

in at least about 60% of said alkylaryl composition, A is attached to the moiety

R'''-C(-)H(CH₂)_vC(-)H(CH₂)_xC(-)H(CH₂)_y-CH₃ in the position which is selected from positions alpha- and beta- to either of the two terminal carbon atoms thereof;

wherein further said composition has a ratio of nonquaternary to quaternary carbon atoms in the moiety

R'''-C(-)H(CH₂)_vC(-)H(CH₂)_xC(-)H(CH₂)_y-CH₃

of at least about 10:1 by weight, when said quaternary carbon atoms are present.

18. (canceled)

19. (canceled)

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20. (currently amended) The composition according to Claim [[8]] 17 wherein A is benzene.

21. (currently amended) The composition according to Claim [[8]] 17 wherein A is toluene.

22. (currently amended) The composition according to Claim [[7]] 17 wherein one of R' and R'' is methyl or ethyl.

23. (currently amended) The composition according to Claim [[7]] 17 wherein one of R' and R'' is methyl.

24. (currently amended) The composition according to Claim [[7]] 17 wherein at least about 80% of said composition, A is attached to R'''-CH(CH₂)_vCH(CH₂)_xCH(CH₂)_y-CH₃ in the position which is selected from positions alpha- and beta- to either of the two terminal carbon atoms thereof.

25. (currently amended) The composition according to Claim [[7]] 17 wherein R''' is hydrogen, methyl or ethyl.

26. (currently amended) A[[n]] composition suitable as a source for making alkylarylsulfonate surfactants, wherein said composition comprises:

a) from about 0.01% to about 99.99% by weight of an composition comprising at least two isomers of the formula:



wherein:

L is an acyclic aliphatic hydrocarbonyl of from 6 to 18 carbon atoms in total;

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R' is selected from H and C₁ to C₃ alkyl;

R'' is selected from H and C₁ to C₃ alkyl;

both R' and R'' are nonterminally attached to L and at least one of R' and R'' is C₁ to

C₃ alkyl;

R''' is selected from H and C₁ to C₃ alkyl; and

A is an aromatic hydrocarbon selected from the group consisting of benzene, toluene, xylene, naphthalene, and mixtures thereof;

wherein:

said composition comprises two or more isomers with respect to positions of attachment of R', R'' and A to L;

in at least about 60% of said composition, A is attached to L in the position which is selected from positions alpha- and beta- to either of the two terminal carbon atoms thereof; and

wherein further said composition has a ratio of nonquaternary to quaternary carbon atoms in L of at least about 10:1 by weight, when said quaternary carbon atoms are present; and

b) from about 0.01% to about 99.99% by weight of at least one isomer of the linear analog of said composition of (a).

27. (currently amended) The composition according to Claim [[15]] 26 wherein at least about 80% of said composition, A is attached to L in the position which is selected from positions alpha- and beta- to either of the two terminal carbon atoms thereof.

28. (canceled)

29. (canceled)

30. (currently amended) The composition according to Claim [[17]] 26 wherein A is benzene.

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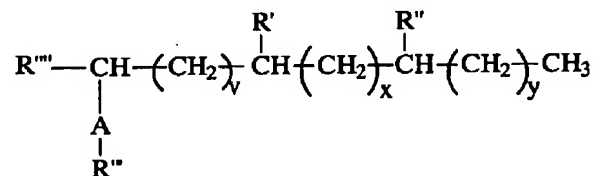
31. (currently amended) The composition according to Claim [[17]] 26 wherein A is toluene.

32. (currently amended) The composition according to Claim [[15]] 26 wherein one of R' and R'' is methyl or ethyl.

33. (currently amended) The composition according to Claim [[20]] 26 wherein one of R' and R'' is methyl.

34. (currently amended) A[[n]] composition suitable as a source for making alkylarylsulfonate surfactants, wherein said composition comprises:

a) from about 0.01% to about 99.99% by weight of an composition comprising at least two isomers, counted exclusive of ortho-, meta-, para- and stereoisomers, of an alkylaryl of the formula:



wherein A is an aromatic hydrocarbon selected from the group consisting of benzene, toluene, xylene, naphthalene, and mixtures thereof; R''' is selected from H and C₁ to C₃ alkyl; R' is selected from hydrogen and C₁ to C₃ alkyl; R'' is selected from hydrogen and C₁ to C₃ alkyl; and R''' is selected from hydrogen and C₁ to C₄ alkyl; v is an integer from 0 to 10; x is an integer from 0 to 10; y is an integer from 0 to 10; wherein:

the total number of carbon atoms attached to A is less than about 20;

said composition comprises two or more isomers with respect to positions of attachment of R', R'' and A to the moiety

R'''-C(-)H(CH₂)_vC(-)H(CH₂)_xC(-)H(CH₂)_y-CH₃ of this formula;

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at least one of R' and R" is C₁ to C₃ alkyl; when R''' is C₁, the sum of v + x + y is at least 1; and when R''' is H, the sum of v + x + y is at least 2; and in at least about 60% of said composition, A is attached to the moiety R'''-C(-)H(CH₂)_vC(-)H(CH₂)_xC(-)H(CH₂)_y-CH₃ in the position which is selected from positions alpha- and beta- to either of the two terminal carbon atoms thereof;

wherein further said composition has a ratio of nonquaternary to quaternary carbon atoms in the moiety



of at least about 10:1 by weight, when said quaternary carbon atoms are present; and

b) from about 0.01% to about 99.99% by weight of at least one isomer of the linear analog of said composition of (a).

35. (canceled)

36. (canceled)

37. (currently amended) The composition according to Claim [[23]] 34 wherein A is benzene.

38. (currently amended) The composition according to Claim [[23]] 34 wherein A is toluene.

39. (currently amended) The composition according to Claim [[22]] 34 wherein one of R' and R" is methyl or ethyl.

40. (currently amended) The composition according to Claim [[26]] 34 wherein one of R' and R" is methyl.

41. (currently amended) The composition according to Claims [[22]] 34 wherein at least about 80% of said composition, A is attached to R'''-

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$\text{CH}(\text{CH}_2)_v\text{CH}(\text{CH}_2)_x\text{CH}(\text{CH}_2)_y\text{-CH}_3$ in the position which is selected from positions alpha- and beta- to either of the two terminal carbon atoms thereof.

42. (currently amended) The composition according to Claim [[22]] 34 wherein R''' is hydrogen, methyl or ethyl.